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Mr. Mark Malinowski
California Department of Health Services
Toxics Substances Control Division, Region 2
700 Heinz Ave., Bldg. F, Suite 200
Berkeley, CA 94710

Subj: REMEDIAL INVESTIGATION/FEASIBILITY STUDY GEOTECHNICAL SAMPLING AND ANALYSES AT NAS ALAMEDA

After evaluating the geotechnical sampling and analysis for Phases 2B and 3 of the Remedial Investigation/Feasibility Study (RI/FS) at the Naval Air Station (NAS) Alameda, we are proposing the changes shown in enclosure (1). We believe that these changes would not affect the quality of the RI/FS data as supported by the following justification:

- The Modified Proctor Compaction and One Dimension Consolidation tests were deleted from the proposed analyses list because the information gained from these analyses is not needed for the evaluation of remedial alternatives, as was previously stated in the work plan.

- Gradation, Cation Exchange Capacity, Specific Gravity and Permeability tests were significantly reduced because they have limited use in the evaluation of contaminant transport or remediation selection.

- Moisture Content/Density tests were increased to provide information on soil density, degree of saturation, and to calculate porosity. Atterberg Limits were added to provide the liquid and plastic limits of the soils underlying the sites, which are necessary for classification using the United Soil Classification System.

We request your concurrence with our proposed changes and appreciate your continued guidance and involvement in the IR program. Please direct any questions to Commander, Western Division, Naval Facilities Engineering Command (Attn: Ms. Bella G. Dizon, Code 1813BD, (415) 244-2552).

Sincerely,

Original signed by:

RICHARD SERAYDARIAN
Head, Installation/Restoration Section

Encl:
(1) Proposed Number of Geotechnical Analyses

Copy to:
Environmental Protection Agency (Attn: Ms. Julie Anderson)
Regional Water Quality Control Board (Attn: Mr. Rico Duazo)
NAS Alameda (Attn: Mr. Randy Cate)
Blind copy to: 1813, 1813BD, 1813EG, Admin Record
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File: ALAMEDA/NAS

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TABLE 2

PROPOSED NUMBER OF GEOTECHNICAL ANALYSES
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	Gradation			
	Surface Samples		Subsurface Samples	
Site	Work Plan	Proposed*	Work Plan	Proposed*
4	30	10	0	3
5	13	7	65	13
6	19	9	95	19
7	10	0	50	10
8	12	6	60	12
10	4	4	20	4
11	7	3	35	7
12	10	5	50	10
14	48	6	15	6
15	58	6	15	6
	211	56	405	90

* Fifty percent will be without hydrometer analyses

	Permeability			
	Surface Samples		Subsurface Samples	
Site	Work Plan	Proposed	Work Plan	Proposed
4	30	10	0	3
5	13	7	6	6
6	19	3	3	3
7	10	0	10	4
8	12	2	2	2
10	4	2	2	2
11	7	1	5	2
12	10	1	3	2
14	48	3	3	3
15	58	3	3	3
	211	32	37	30

ENCLOSURE (1)

TABLE 2

PROPOSED NUMBER OF GEOTECHNICAL ANALYSES
(Page 2 of 4)

Site	Proctor Compaction			
	Surface Samples		Subsurface Samples	
	Work Plan	Proposed	Work Plan	Proposed
4	--	--	--	--
5	--	--	65	--
6	--	--	3	--
7	--	--	--	--
8	--	--	--	--
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
14	--	--	--	--
15	--	--	--	--
	0	0	68	0

Site	Moisture Content/Density			
	Surface Samples		Subsurface Samples	
	Work Plan	Proposed	Work Plan	Proposed
4	--	15	--	3
5	--	--	6	33
6	--	--	3	3
7	--	--	10	6
8	--	--	2	10
10	--	--	2	6
11	--	--	5	14
12	--	--	3	10
14	--	--	3	6
15	--	--	3	6
	0	15	31	97

TABLE 2

PROPOSED NUMBER OF GEOTECHNICAL ANALYSES

	Specific Gravity			
	Surface Samples		Subsurface Samples	
Site	Work Plan	Proposed	Work Plan	Proposed
4	--	--	--	--
5	--	--	65	4
6	--	--	95	4
7	--	--	50	2
8	--	--	60	1
10	--	--	20	1
11	--	--	35	1
12	--	--	50	3
14	--	--	15	--
15	--	--	15	3
	0	0	405	19

	Consoliation			
	Surface Samples		Subsurface Samples	
Site	Work Plan	Proposed	Work Plan	Proposed
4	--	--	--	--
5	--	--	6	--
6	--	--	3	--
7	--	--	10	--
8	--	--	2	--
10	--	--	2	--
11	--	--	5	--
12	--	--	3	--
14	--	--	3	--
15	--	--	3	--
	0	0	37	0

TABLE 2

PROPOSED NUMBER OF GEOTECHNICAL ANALYSES
(Page 4 of 4)

	Cation Exchange Capacity			
	Surface Samples		Subsurface Samples	
Site	Work Plan	Proposed	Work Plan	Proposed
4	--	3	--	4
5	--	--	65	6
6	--	--	95	3
7	--	--	50	3
8	--	--	60	3
10	--	--	20	2
11	--	--	35	2
12	--	--	50	1
14	--	--	15	1
15	--	--	15	2
	0	3	405	27

	Atterberg Limits			
	Surface Samples		Subsurface Samples	
Site	Work Plan	Proposed	Work Plan	Proposed
4	--	--	--	2
5	--	--	--	6
6	--	--	--	4
7	--	--	--	4
8	--	--	--	2
10	--	--	--	2
11	--	--	--	1
12	--	--	--	1
14	--	--	--	3
15	--	--	--	3
	0	0	0	28